## May 8 - 9, 2000 TOCDF Stack Release Timeline

1548 hours	Last rocket fed to the DFS
1621 hours	DFS Stop Feed – lower feed gate is jammed
1640 hours	DFS Kiln goes into oscillation mode
1730 hours	DFS HDC clear of material
1951 hours	DFS Kiln pressure (16-PIT-018) begins to fluctuate
	DFS Afterburner exhaust gas differential pressure (16-PDIT-813) begins to rise from
	0.25 in. w.c.
	DFS Afterburner exhaust residence time (16-KI-813) begins to drop from 3.7 seconds
2010 hours	DFS kiln pressure lowered to -1.5 in. w.c.
2020 hours	DFS Afterburner exhaust flow (16-FI-813) high flow alarm
2030 hours	DPE entrants begin to inspect feed chute
2036 hours	DPE entrants notify the CON that there appeared to be some debris clinging to the sides
	of the feed chute
2042 hours	DFS Operator notices that the kiln pressure is making minor excursions affecting the
	operation of the ID fans
2127 hours	DPE entrants washing down the feed chute
2131 hours	DPE entrants done with feed chute clean out and wash down, both gates closed
2133 hours	DPE entrants changing out strainers on AQS
2137 hours	DPE entrants place 1.0 lbs. of agent waste on the DFS feed gate
2145 hours	DFS Operator observes that the DFS PAS Venturi is opened to 100%
2158 hours	DFS Kiln exhaust temperature (16-TIT-182) begins to drop from 1440 °F
	DFS Afterburner exhaust temperature (16-TIT-092) begins to drop from 2120 °F
2159 hours	DFS exhaust gas flow (PAS-SCRB-102, 24-XS-430) malfunctions
2200 hours	DFS PAS Quench tower exhaust temperature (24-TIT-374) begins to drop from 169 °F
2201 hours	DFS Afterburner exhaust temperature (16-TIT-092) reaches 2107 °F
2202 hours	DFS PAS O <sub>2</sub> (24-AIT-206, 16-AIT-175) jumps to 20.9%
	DFS PAS CO (16-AIT-059H, 24-AIT-207H) begins to rise
	DFS exhaust gas flow (PAS-SCRB-102, 24-FSLL-430) FLOW LO LO alarm
	DFS Afterburner and Kiln burners locked out
	DFS Afterburner exhaust temperature (16-TIT-092) drops below the RCRA low
	temperature
2206 hours	DFS Kiln exhaust gas temperature (16-TIT-182) drops below the RCRA low
	temperature
2209 hours	DFS Operator concludes that there may be a problem with the KURZ flow indicator
22101	(FIT-430)
2210 hours	DFS PAS Demister liquid level begins to rise
2243 hours	ACAM ECR 312 (ECR B) reading 0.30 MPL
	ACAM DFS 352 (DFS Room) reading 0.05 TWA
00.47.1	ACAM DFS 352 (DFS Room) reading 0.03 TWA
2247 hours	ACAM ECR311 (ECR A) reading .99 TWA
2248 hours	DFS Kiln pressure (16-PIT-018) reaches -2.0 in. w.c. (bottom of the instrument range)
	DFS Room pressure (76-PDIC-481) is at -0.68 in. w.c.
	ECR A pressure (76-PDIC-423) is at -1.24 in. w.c.
	ECR B pressure (76-PDIC-424) is at -1.93 in. w.c.

2249 hours	ACAM ECR 312 (ECR B) reading .32 MPL
	ACAM DFS 352 (DFS Room) reading .05 TWA
2250 hours	ACAM ECR 311 (ECR A) reading 1.17 TWA
2318 hours	DFS PAS Clean Liquor pump stopped (24-FIC-036)
	DFS Afterburner exhaust residence time (16-KI-813) reaches a low of 1.7 seconds
2320 hours	DFS PAS Venturi differential pressure (24-PDIC-008) jumps to 50 in. w.c. (top of the
	instrument range)
2325 hours	ACAM PAS 702 begins to show low level readings, between 0.05 and 0.15 ASC
	DFS Room pressure (76-PDIC-481) is at -2.0 in. w.c.
	ECR A pressure (76-PDIC-423) is at -1.38 in. w.c.
	ECR B pressure (76-PDIC-424) is at -2.15 in. w.c.
2326 hours	ACAM PAS 701C first alarms at 0.63 ASC
	Site masked
	DFS Kiln exhaust gas temperature (16-TIT-182) is at 204 °F
	DFS Afterburner exhaust gas temperature (16-TIT-092) is at 1250 °F
2327 hours	ACAM PAS 701A first alarms at 1.57 ASC
2329 hours	TOCDF Con notifies DCD EOC
2330 hours	DFS Kiln exhaust temperature (16-TIT-182) reaches 194 °F
	DFS Afterburner exhaust temperature (16-TIT-092) reaches 1214 °F
2334 hours	DFS Afterburner exhaust residence (16-KI-813) time climbs to 2.7 seconds
200 :	DFS Kiln pressure (16-PIT-018) begins to fluctuate
2336 hours	DFS Kiln pressure (16-PIT-018) reaches –0.23 in. w.c.
2337 hours	Started DAAMS at PAS 701E
2338 hours	Pulled DAAMS tubes at PAS 702 due to PAS 701 alarm
2340 hours	ACAM PAS 701A peaks at 3.39 ASC
	ACAM PAS 701C peaks at 3.63 ASC
	ACAM PAS 702 alarms at peak of 1.45 ASC
	DFS Kiln pressure (16-PIT-018) is at -2.0 in. w.c.
	DFS Room pressure (76-PDIC-481) is at -1.21 in. w.c.
	ECR A pressure (76-PDIC-423) is at -1.32 in. w.c.
	ECR B pressure (76-PDIC-424) is at -2.05 in. w.c.
2342 hours	DFS Afterburner exhaust residence time (16-KI-813) reaches a high of 10.0 seconds
2344 hours	DFS Operator directed to bottle up the furnace
2355 hours	TOCDF Con updates DCD EOC
2343 hours	DFS PAS Venturi differential pressure (24-PDIC-008) drops to 1.0 in. w.c.
2346 hours	DFS Kiln pressure (16-PIT-018) goes positive
2347 hours	DAAMS at PAS 701D pulled
2351 hours	DFS PAS Venturi differential pressure (24-PDIC-008) jumps to 21.7 in. w.c.
2356 hours	DAAMS at PAS 701E pulled
0018 hours	Site unmasked
0019 hours	DFS Afterburner exhaust temperature (16-TIT-092) reaches 1597 °F
0022 hours	DFS PAS Venturi differential pressure (24-PDIC-008) jumps to 50 in. w.c.
	DFS Kiln pressure (16-PIT-018) goes negative and begins to fluctuate
0023 hours	DFS Afterburner exhaust residence time (16-KI-813) begins to drop from 10.0 seconds
	ACAM PAS 702 alarms at 0.93 ASC
0025 hours	DCD EOC reports all ACAMS cleared, waiting for DAAMS
0028 hours	ACAM PAS 701 B alarms at 0.39 ASC
	ACAM PAS 702 reading drops to 0.87 ASC

0029 hours ACAM PAS 701 C alarms at 0.56 ASC Site masked DFS Kiln exhaust gas temperature (16-TIT-182) is at 227 °F DFS Afterburner exhaust temperature (16-TIT-092) reaches 1344 °F DFS Afterburner exhaust residence time (16-KI-813) reaches approximately 3.0 seconds 0031 hours DFS Afterburner exhaust residence time (16-KI-813) reaches a high of 10.0 seconds ACAM PAS 701 B peaks at 0.74 ASC PAS 701 D DAAMS tube from first alarm analyzed and confirmed at 2.87 ASC DFS Kiln pressure (16-PIT-018) goes positive 0032 hours TOCDF Con notifies DCD EOC of new alarms DFS Operator directed to bottle up the furnace ACAM PAS 701 C peaks at 0.81 ASC PAS 701 DAAMS tube pulled for second alarm DFS PAS Venturi differential pressure (24-PDIC-008) drops to 1.0 in. w.c. 0038 hours ACAM PAS 701 C clears 0039 hours ACAM PAS 701 B clears 0040 hours DAAMS at PAS 702 pulled for second alarm 0056 hours ACAM PAS 702 clears 0058 hours Confirmation of PAS 701 D for first alarm reported to the control room 0107 hours Site unmasked 0117 hours TOCDF Con notifies DCD EOC of DAAMS confirmation PAS 702 DAAMS A-tube analyzed and confirmed at 4.00 ASC 0127 hours PAS 701 E DAAMS A-tube from the first alarm analyzed and confirmed at 0.87 ASC 0148 hours 0149 hours DAAMS tube from PAS 701 second alarm analyzed and confirmed at 0.69 ASC DAAMS tube from PAS 702 second alarm analyzed and confirmed at 0.57 ASC 0223 hours 0230 hours Confirmation of PAS 701 DAAMS tube from the second alarm reported to the control room 0302 hours Confirmation of PAS 702 DAAMS tube from the second alarm reported to the control 0315 hours PAS 702 DAAMS B-tube from the first alarm analyzed and confirmed at 4.01 ASC DCD EOC notifies Tooele County 0334 hours 0344 hours PAS 701 E DAAMS B-tube from the first alarm analyzed and confirmed at 0.87 ASC 0355 hours CAMDS was requested to collect the perimeter DAAMS tubes 0359 hours Confirmation of PAS 701 E, A-tube, from the first alarm reported to the control room Confirmation of PAS 702, A-tube, from the first alarm reported to the control room Confirmation of PAS 702, B-tube, from the first alarm reported to the control room 0424 hours Confirmation of PAS 701 E, B-tube, from the first alarm reported to the control room 0454 hours DPE entrants decon 1 lb of agent waste after removing it from the DFS feed gate